GSL Science Panel Report

to the

GSL Steering Committee

January 31, 2006

Conceptual Model for Selenium Cycling in the Great Salt Lake

- Final Draft completed
- Submitted January 23, 2006
- DWQ/Science Panel Reviewing
- Final Completion Date: Feb 2006

Science Panel Studies

- Perform Designated Studies Leading to the Development of a Selenium Standard for the Open Waters of the Great Salt Lake
- Gilbert Bay
- Assist with review and collection of data
- Examine issues associated with selenium uptake and bio-concentration

Science Panel - Projects

- Project 1: Determine ambient selenium concentrations in water, brine shrimp, brine flies, and bird eggs. Determine stomach contents of nesting birds
- Project 2: Design and conduct a selenium concentrations synoptic surveys in the water and brine shrimp within Gilbert Bay

Science Panel - Projects

- Project 3: Determine selenium loadings from point sources and rivers to Gilbert Bay.
- Project 4: Develop a selenium transfer/flux model between the sediments and water column

Science Panel Tasks

- Identify Potential Contractors
- Provided a preliminary baseline for further consideration of the applicant and his qualifications

Choosing the Prime Contractor

- Selection Process
  - Science Panel Review of SOQ/SOI
  - Review Components:
    - Overall project management
    - Accessibility
    - Logistics
    - Publications
    - Experience on Related Projects
    - Deliverables
    - Laboratory Capability
  - Round Robin Adherence
  - Science Panel Discussion and Consensus

Choosing a Prime Contractor

- Science Panel Conference Calls of Jan 24th and Jan. 30, 2005
- Selection Process
  - Eight of the 9 Science Panel members participated in this effort.
  - 1 Science Panel Member was listed as a subcontractor
- Potential Contractors Submitting
  - CH2M-Hill & CWECS (University of Utah)
  - Tetra-Tech – Lafayette, CA & Salt Lake City
  - John Cavitt – Weber State University

Science Panel Recommendations to DWQ

- Prime Contractor
  - CH2M-Hill & CWECS (University of Utah)
- Strong Consensus
  - "… recruit and be aware of the resources available"
  - "… highly desirable to collaborate"
    - Project 1: John Cavitt
    - Project 4: Tetra-Tech

Science Panel Recommendations to DWQ

- Analytical Work
  - Hydride Generation
    - Detection Limit of 0.1 ug/l
  - 10% Verification of Samples
    - Hydride Generation or “collision cell” ICP-MS
- Initial meeting with prime contractor
  - January 31, 2005
- Project Scoping Meeting: Feb. 9, 2006